```
     FILE 'CAPLUS, BIOSIS' ENTERED AT 08:14:08 ON 10 JUL 2008
L1         42054 HCV
L2         33287 POLYNUCLEOTIDE
L3         92644 FUSION (W) PROTEIN
L4            98 L1 AND L2
L5           575 L3 AND L1
L6         10567 CORE (S) ANTIGEN
L7          5174 NS3
L8          1128 NS4
L9          1797 NS5
L10          376 L6 AND L7
L11          186 L10 AND L8
L12          134 L11 AND L9
L13            1 L12 AND L4
L14            1 L13 AND L4
L15          340 "HCV-1"

     FILE 'CAPLUS' ENTERED AT 08:29:38 ON 10 JUL 2008
L16          156 HCV-1
L17            3 NS3 FULL LENGTH
L18            0 L16 AND L17
L19          638 HCV NS3
L20           35 L19 AND NS4
L21           20 L20 AND NS5
L22           12 L21 AND CORE
L23          141 L5 AND NS3
L24           37 L23 AND NS4
L25            0 N24 AND NS5
L26           21 L24 AND NS5
L27           17 L26 AND CORE
L28        23524 SAPONIN
L29         1083 L28 AND CHOLESTEROL
L30            0 L29 AND L23
L31            0 L29 AND L5
L32          638 HCV NS3
L33           30 HCV NS4
L34           48 HCV NS5
L35         1161 HCV CORE
L36          156 HCV-1
L37            7 L32 AND L36
L38            0 L33 AND L36
L39            1 L34 AND L36
L40           14 L35 AND L36
L41            0 L29 AND L32
L42            0 L29 AND L33
L43            0 L29 AND L34
L44            0 L29 AND L35

=> L7 and L8
L45          393 L7 AND L8

=> L45 and L9
L46          236 L45 AND L9

=> different genotype
        2622876 DIFFERENT
            105 DIFFERENTS
        2622953 DIFFERENT
                    (DIFFERENT OR DIFFERENTS)
          62107 GENOTYPE
          87714 GENOTYPES
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        109922 GENOTYPE
                  (GENOTYPE OR GENOTYPES)
L47       2799 DIFFERENT GENOTYPE
                  (DIFFERENT(W)GENOTYPE)

=> L47 and L46
L48          2 L47 AND L46

=> peptide (p) antigen
        397589 PEPTIDE
        289691 PEPTIDES
        507390 PEPTIDE
                  (PEPTIDE OR PEPTIDES)
        340067 ANTIGEN
        267160 ANTIGENS
        428672 ANTIGEN
                  (ANTIGEN OR ANTIGENS)
L49      36469 PEPTIDE (P) ANTIGEN

=> L49 and L46
L50         30 L49 AND L46

=> L47 and L50
L51          1 L47 AND L50

=> D L48 IBIB ABS 1-2

L48  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:        2005:984887  CAPLUS
DOCUMENT NUMBER:         143:384632
TITLE:                   Design of novel conformational and genotype-specific
                         antigens for improving sensitivity of immunoassays for
                         hepatitis C virus-specific antibodies
AUTHOR(S):               Lin, Sansan; Arcangel, Phillip; Medina-Selby,
                         Angelica; Coit, Doris; Ng, Philip; Nguyen, Steve;
                         McCoin, Colin; Gyenes, Alex; Hu, Celine; Tandeske,
                         Laura; Phelps, Bruce; Chien, David
CORPORATE SOURCE:        Chiron Corporation, Emeryville, CA, 94608, USA
SOURCE:                  Journal of Clinical Microbiology (2005), 43(8),
                         3917-3924
                         CODEN: JCMIDW; ISSN: 0095-1137
PUBLISHER:               American Society for Microbiology
DOCUMENT TYPE:           Journal
LANGUAGE:                English
AB   The current com. licensed enzyme-linked immunosorbent assays (ELISAs) for
     hepatitis C virus (HCV) mainly use recombinant proteins containing linear
     epitopes.  There is evidence, however, that conformational epitopes of HCV
     are more immunoreactive.  Thus, we have designed an HCV antibody assay
     that employs a conformational protein, NS3NS4a PI (with functional
     protease and helicase activities), and a linear fusion protein,
     multiple-epitope fusion antigen 7.1 (MEFA 7.1) or MEFA 7.2.  We have shown
     that NS3NS4a PI detects early-seroconversion conformation-sensitive
     antibodies better than c33c antigen.  The correct conformation of NS3NS4a
     PI also cross-reacts with different genotype samples
     better than the c33c antigen.  MEFA 7.1 and MEFA 7.2 incorporate all the
     major immunodominant and genotype-specific epitopes of HCV core, E1, E2
     hypervariable region 1 (HVR1), E2 HVR1-plus-HVR2 consensus, NS3,
     NS4, and NS5.  Since MEFA 7.1 is degraded by the active
     NS3NS4a PI protease, we designed a second MEFA 7.2 construct in which the
     six protease cleavage sites found in MEFA 7.1 were eliminated by amino
     acid mutation.  We demonstrate here that MEFA 7.2 remains intact in the
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presence of NS3NS4a PI and preserves the epitopes present in MEFA 7.1. Compared to currently licensed assays, an ELISA incorporating a combination of the two antigens NS3NS4a PI and MEFA 7.1 or 7.2 demonstrates better serotype sensitivity and detects seroconversion earlier in many com. available panels. We believe that an assay using NS3NS4a PI and MEFA 7.1 or 7.2 may have the potential to replace current HCV immunoassays for better sensitivity.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L48 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:298250 CAPLUS

DOCUMENT NUMBER: 131:127333

TITLE: Use of a novel hepatitis C virus (HCV) major-epitope chimeric polypeptide for diagnosis of HCV infection

AUTHOR(S): Chien, David Y.; Arcangel, Phillip; Medina-Selby, Angelica; Coit, Doris; Baumeister, Mark; Nguyen, Steve; George-Nascimento, Carlos; Gyenes, Alexander; Kuo, George; Valenzuela, Pablo

CORPORATE SOURCE: Chiron Corporation, Emeryville, CA, 94507, USA

SOURCE: Journal of Clinical Microbiology (1999), 37(5), 1393-1397
CODEN: JCMIDW; ISSN: 0095-1137

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The genome of hepatitis C virus (HCV) consists of seven functional regions: the core, E1, E2/NS1, NS2, NS3, NS4, and NS5 regions. The U.S. Food and Drug Administration-licensed 2.0G immunoassay for the detection of anti-HCV uses proteins from the core, NS3, and NS4 regions. The 3.0G ELISA includes the protein from the NS5 region. The necessity of detecting antibodies to viral envelope proteins (E1 and E2) and to different genotype samples has been demonstrated previously. In this study we have attempted to improve the sensitivity of the anti-HCV assay by developing a single multiple-epitope fusion antigen (MEFA; MEFA-6) which incorporates all of the major immunodominant epitopes from the seven functional regions of the HCV genome. A nucleic acid sequence consisting of proteins from the viral core, E1, E2, NS3, NS4, and NS5 regions and different subtype-specific regions of the NS4 region was constructed, cloned, and expressed in yeast. The epitopes present on this antigen can be detected by epitope-specific monoclonal and polyclonal antibodies. In a competition assay, the MEFA-6 protein competed with 83 to 96% of genotype-specific antibodies from HCV genotype-specific peptides. This recombinant antigen was subsequently used to design an anti-HCV chemiluminescent immunoassay. We designed our assay using a monoclonal anti-human IgG antibody bound to the solid phase. Because MEFA-6 is fused with human superoxide dismutase (h-SOD), we used an anti-human superoxide dismutase, di-Me acridinium ester-labeled monoclonal antibody for detection. Our results indicate that MEFA-6 exposes all of the major immunogenic epitopes. Its excellent sensitivity and specificity for the detection of clin. seroconversion are demonstrated by this assay.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L50 IBIB ABS 1-30

L50 ANSWER 1 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:449448 CAPLUS

DOCUMENT NUMBER: 143:6261
TITLE: New immunogenic peptides derived for nonstructural protein NS3 of hepatitis C virus for use in treatment and prevention of infection
INVENTOR(S): Fournillier, Anne; Inchauspe, Genevieve; Martin, Perrine
PATENT ASSIGNEE(S): Biomerieux, Fr.
SOURCE: Fr. Demande, 124 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2862648	A1	20050527	FR 2003-13649	20031121
FR 2862648	B1	20060203		
WO 2005051420	A1	20050609	WO 2004-FR50581	20041110

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: FR 2003-13649 A 20031121
AB New antigenic peptides of the nonstructural protein NS3 of hepatitis C virus are identified in the 86-amino acid fragment 1096-1181 of the viral polyprotein. These include 6 new epitopes recognized by HLA-B7-restricted T cells. These epitopes may be used in combination with epitopes from the non-structural proteins NS4 and NS5b in vaccines against the virus (no data.).
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 2 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:880822 CAPLUS
DOCUMENT NUMBER: 142:154107
TITLE: High resolution analysis of cellular immune responses in resolved and persistent hepatitis C virus infection
AUTHOR(S): Lauer, Georg M.; Barnes, Eleanor; Lucas, Michaela; Timm, Joerg; Ouchi, Kei; Kim, Arthur Y.; Day, Cheryl L.; Robbins, Gregory K.; Casson, Deborah R.; Reiser, Markus; Dusheiko, Geoffrey; Allen, Todd M.; Chung, Raymond T.; Walker, Bruce D.; Klenerman, Paul
CORPORATE SOURCE: Partners AIDS Research Center, Massachusetts General Hospital and Harvard Medical School, Boston, MA, USA
SOURCE: Gastroenterology (2004), 127(3), 924-936
CODEN: GASTAB; ISSN: 0016-5085
PUBLISHER: Elsevier Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Background & Aims: Cellular immune responses are thought to play a key role in the resolution of primary HCV infection. Although it has been consistently shown that CD4+ T-cell responses are maintained in those with spontaneous resolution but lost in those with persistent infection, the role

of CD8+ T-cell responses remains controversial. Previous studies have largely focused on limited HLA alleles and predefined CD8+ T-cell epitopes, and, thus, comprehensive studies remain to be performed. Methods: To understand the composition of the immune response associated with spontaneous resolution, the authors comprehensively mapped CD8+ T-cell responses in 20 HLA-diverse persons with resolved HCV infection, using HCV peptides spanning the entire genome. The authors analyzed the magnitude, breadth, function, and phenotype using ELISpot, class-I tetramers, intracellular cytokine staining, and cytolytic assays. The authors studied in parallel HCV-specific responses and viral sequence variation in persistent infection. Results: Responses in individuals with resolved infection were strong and broad with robust proliferation in response to antigen. Responses in those persistently infected were rarely detected ex vivo and, when present, were narrowly directed and weak. However, they also proliferated in vitro. Dominant target epitopes differed among individuals in both cohorts, despite frequently shared HLA-alleles. Conclusions: These data indicate that persisting, strong CD8+ T-cell responses are observed in the majority of persons with resolved HCV infection and provide support for strategies to boost CD8+ T-cell responses for the prevention or treatment of HCV infection but also highlight the diversity of responses that may need to be elicited to provide protection.

REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 3 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:161546 CAPLUS

DOCUMENT NUMBER: 140:269143

TITLE: Peptide-Protein Microarrays for the Simultaneous Detection of Pathogen Infections

AUTHOR(S): Duburcq, Xavier; Olivier, Christophe; Malingue, Frederic; Desmet, Remi; Bouzidi, Ahmed; Zhou, Fenhling; Auriault, Claude; Gras-Masse, Helene; Melnyk, Oleg

CORPORATE SOURCE: UMR CNRS 8527, Biological Institute of Lille, Lille, 59021, Fr.

SOURCE: Bioconjugate Chemistry (2004), 15(2), 307-316
CODEN: BCCHES; ISSN: 1043-1802

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors describe novel peptide-protein microarrays, which were fabricated using semicarbazide glass slides that permitted the immobilization of glyoxylyl peptides by site-specific ligation and the immobilization of proteins by physisorption. The arrays permitted the simultaneous serodetection of antibodies directed against hepatitis C virus (HCV core p21 15-45 peptide, NS4 1925-1947 peptide, core, NS3, NS4, and mixture of core, NS3, NS4, and NS5 antigens), hepatitis B virus (HBc, HBe, and HBs), human immunodeficiency virus (Gp41 and Gp120 for HIV-I and Gp36 for HIV-II), Epstein-Barr virus (VCAp18 153-176 peptide), and syphilis (rTpN47 and rTpN17) antigens using an immunofluorescence assay. Peptide -protein microarrays displayed high signal-to-noise ratios, sensitivities, and specificities for the detection of antibodies as revealed by the anal. of a collection of human sera referenced against these five pathogens.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 4 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:168544 CAPLUS

DOCUMENT NUMBER: 138:220351
TITLE: Identification and preparation of peptides as epitopes recognized by hepatitis C virus-specific cytotoxic T cell and vaccine against hepatitis C virus (HCV)
INVENTOR(S): Funatsuki, Kiyomi; Ishiko, Hiroaki; Ikai, Michio
PATENT ASSIGNEE(S): Mitsubishi Chemical Bio-Clinical Laboratories Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003064096	A	20030305	JP 2001-259358	20010829
PRIORITY APPLN. INFO.:			JP 2001-259358	20010829

AB Eight peptides including H-Phe-Thr-Gly-Asp-Phe-Asp-Ser-Val-OH (I), H-Gly-Phe-Thr-Gly-Asp-Phe-Asp-Ser-Val-OH (II), H-Phe-Thr-Gly-Asp-Phe-Asp-Ser-Val-Ile-OH (III), H-Gly-Lys-Tyr-Leu-Phe-Asn-Trp-Ala-Val-Lys-Thr-Lys-Leu-Lys-Leu-OH (IV), H-Arg-Pro -Arg-Trp-Phe-Met-Leu-Cys-Leu-OH (V), H-Thr-Asp-Ala-Leu-Met-Thr-Gly-Phe-Thr-Gly-Asp-Phe-Asp-Ser-Val-Ile-Asp-Cys-Asn-Thr-OH (VI), H-His-Ser-Leu-Ser-Arg-Ala-Arg-Pro-Arg-Trp-Phe-Met-Leu-Cys-Leu-OH (VII), and H-Ala-Arg-Pro-Arg-Trp-Phe-Met-Leu-Cys-Leu-Leu-Leu-Leu-Ser-Val-OH (VIII) are disclosed, which are epitopes recognized by hepatitis C virus-specific cytotoxic T cell (CTL) and represented in human leukemia antigen (HLA) class I mol. on the surface of infected cells. Also claimed are a vaccine containing at least one peptide selected from the peptides I, II, III, and VI or at least one peptide selected from IV, V, VII, and VIII as the active ingredients or a vaccine containing at least one DNA selected from DNAs coding the peptides I, II, III, and VI or at least one DNAs coding the peptides IV, V, VII, and VIII as the active ingredients. Above vaccines induce HCV-specific CTL, can completely remove HCV-infected cells by activating the CTL response in patients having HLA-A*0206 and HLA-B*5603, and are useful for prophylaxis or treatment of HCV-infected patients. Thus, cDNA of each HCV gene domain (core, E1, E2, NS2, NS3, NS4, and Ns5) was integrated in pAK10 plasmid which underwent homologous recombination with vaccinia virus (VAC) to produce rVAC. Peripheral blood mononucleosis (PBMC) was separated from peripheral blood sampled from a patient who recovered from acute hepatitis .apprx.11 mo earlier. CD8+ memory T cells were separated from PBMC using magnetic beads and incubated for 2 wk with healthy patient's PBMC treated with interleukin-2 (rIL-2), anti-CD3 antibody, and X-ray irradiation while adding rIL-2 every week to prepare effector cells. PBMC prepared above were infected with EB virus to establish B cell (B-LCL) which were infected with rVAC for 16-18 h to prepare target cells. HCV-specific CTL were isolated by measuring the clastogenicity of effector cells against target cells in a 51Cr release assay and cloned. The isolated cloned cells were examined to show the constraint on HLA-A*0206 in an assay using B-LCL and the clastogenicity against B-LCL treated with the peptide VI which was one of 68 20-amino acid peptides related to NS3 domain (preparation not given). Six peptides having 8 or 9 amino acids synthesized (preparation not given) based on the sequence of VI were examined for the clastogenicity against B-LCL. The peptide I was identified as an epitope recognized by HCV-specific CTL.

L50 ANSWER 5 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:908392 CAPLUS
DOCUMENT NUMBER: 138:13314

TITLE: Comparative vaccine studies in HLA-A2.1-transgenic mice reveal a clustered organization of epitopes presented in hepatitis C virus natural infection
AUTHOR(S): Himoudi, Nourredine; Abraham, Jean-Daniel; Fournillier, Anne; Lone, Yu Chun; Joubert, Aurelie; Op De Beeck, Anne; Freida, Delphinc; Lemonnier, Francois; Kieny, Marie Paule; Inchauspe, Genevieve
CORPORATE SOURCE: Unite Mixte CNRS-BioMerieux, UMR 2142, Ecole Normale Superieure, Lyon, 69364, Fr.
SOURCE: Journal of Virology (2002), 76(24), 12735-12746
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A polyepitopic CD8+-T-cell response is thought to be critical for control of hepatitis C virus (HCV) infection. Using transgenic mice, we analyzed the immunogenicity and dominance of most known HLA-A2.1 epitopes presented during infection by using vaccines that carry the potential to enter clin. trials: peptides, DNA, and recombinant adenoviruses. The vaccines capacity to induce specific cytotoxic T lymphocytes and interferon gamma-producing cells revealed that immunogenic epitopes are clustered in specific antigens. For two key antigens, flanking regions were shown to greatly enhance the scope of epitope recognition, whereas a DNA-adenovirus prime-boost vaccination strategy augmented epitope immunogenicity, even that of subdominant ones. The present study reveals a clustered organization of HCV immunogenic HLA.A2.1 epitopes and strategies to modulate their dominance.

REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 6 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:907206 CAPLUS
DOCUMENT NUMBER: 138:3667
TITLE: HLA class I binding peptides and their uses
INVENTOR(S): Sette, Alessandro; Sidney, John; Southwood, Scott
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part of U.S. Ser. No. 590,298, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 34
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020177694	A1	20021128	US 1998-17743	19980203
US 20070055049	A1	20070308	US 2004-817970	20040406
PRIORITY APPLN. INFO.:			US 1996-590298	B2 19960123
			US 1992-926666	B2 19920807
			US 1993-27146	B2 19930305
			US 1993-27746	B2 19930305
			US 1993-73205	B2 19930604
			US 1993-103396	B2 19930806
			US 1993-121101	B2 19930914
			US 1993-159184	B2 19931129
			US 1993-159339	A2 19931129
			US 1994-186266	A2 19940125
			US 1994-205713	B2 19940304
			US 1994-278634	B2 19940721
			US 1994-305871	A2 19940914

US 1994-344824	B2	19941123
US 1994-347610	B2	19941201
US 1994-349177	B2	19941202
US 1995-451913	B2	19950526
US 1995-454033	B2	19950526
US 1995-452843	B2	19950530
US 1995-485218	B2	19950607
US 1996-589107	B2	19960123
US 1996-589108	B2	19960123
US 1996-13833P	P	19960321
US 1996-13980P	P	19960321
US 1996-753615	B2	19961127
US 1996-753622	B2	19961127
US 1996-758409	B2	19961127
US 1997-815396	B2	19970310
US 1997-821739	B2	19970320
US 1997-822382	B2	19970320
US 1998-17524	B2	19980203
US 1998-17735	B2	19980203
US 1998-17743	B2	19980203
US 1998-98584	B2	19980617
US 1998-189702	A2	19981110
US 1999-226775	B2	19990106
US 1999-260714	B2	19990301
US 1999-141422P	P	19990629
US 1999-346105	B2	19990630
US 2000-665510	B2	20000919
US 2000-242350P	P	20001019
US 2001-264969P	P	20010129
US 2001-285624P	P	20010420
US 2001-935476	B2	20010822
US 2002-121415	A2	20020411
US 2002-30014	B2	20020724
US 2002-416207P	P	20021003
US 2002-417269P	P	20021008
US 2003-470364	A2	20030725
WO 2003-US31308	A2	20031003

AB The present invention provides peptide compns. capable of binding glycoproteins encoded by HLA-A, HLA-B, and HLA-C alleles and inducing T cell activation in T cells restricted by the HLA allele. The peptides are useful to elicit an immune response against a desired antigen. More specifically, the peptides are derived from proteins from hepatitis B virus, hepatitis C virus, HIV, Plasmodium falciparum, and tumor antigens, and contain HLA-B7-like supermotifs. The peptides can be used in therapeutic and diagnostic applications.

L50 ANSWER 7 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:869425 CAPLUS
DOCUMENT NUMBER: 137:368568
TITLE: HLA-A-binding peptides and their uses in vaccines and disease diagnosis
INVENTOR(S): Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S. 6,037,135.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 34

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020168374	A1	20021114	US 1997-821739	19970320
EP 1704868	A1	20060927	EP 2006-10437	19930806
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
US 6037135	A	20000314	US 1993-159339	19931129
CA 2248659	A1	19970925	CA 1997-2248659	19970321
WO 9734617	A1	19970925	WO 1997-US4451	19970321
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9723365	A	19971010	AU 1997-23365	19970321
AU 725550	B2	20001012		
EP 888120	A1	19990107	EP 1997-916104	19970321
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1218404	A	19990602	CN 1997-194554	19970321
BR 9708217	A	19990727	BR 1997-8217	19970321
JP 2002515868	T	20020528	JP 1997-533690	19970321
US 20070055049	A1	20070308	US 2004-817970	20040406
JP 2006169252	A	20060629	JP 2005-364399	20051219

PRIORITY APPLN. INFO.:	US 1992-926666	B2	19920807
	US 1993-27746	B2	19930305
	US 1993-103396	B2	19930806
	US 1993-159339	A2	19931129
	US 1996-13833P	P	19960321
	US 1993-27146	B2	19930305
	US 1993-73205	B2	19930604
	EP 1993-919916	A3	19930806
	JP 1994-505592	A3	19930806
	US 1993-121101	B2	19930914
	US 1993-159184	B2	19931129
	US 1994-186266	A2	19940125
	US 1994-205713	B2	19940304
	US 1994-278634	B2	19940721
	US 1994-305871	A2	19940914
	US 1994-344824	B2	19941123
	US 1994-347610	B2	19941201
	US 1994-349177	B2	19941202
	US 1995-451913	B2	19950526
	US 1995-454033	B2	19950526
	US 1995-452843	B2	19950530
	US 1995-485218	B2	19950607
	US 1996-589107	B2	19960123
	US 1996-589108	B2	19960123
	US 1996-590298	B2	19960123
	US 1996-13980P	P	19960321
	US 1996-753615	B2	19961127
	US 1996-753622	B2	19961127
	US 1996-758409	B2	19961127
	US 1997-815396	B2	19970310
	US 1997-821739	A	19970320
	US 1997-822382	B2	19970320
	WO 1997-US4451	W	19970321
	US 1998-17524	B2	19980203

US 1998-17735	B2	19980203
US 1998-17743	B2	19980203
US 1998-98584	B2	19980617
US 1998-189702	A2	19981110
US 1999-226775	B2	19990106
US 1999-260714	B2	19990301
US 1999-141422P	P	19990629
US 1999-346105	B2	19990630
US 2000-665510	B2	20000919
US 2000-242350P	P	20001019
US 2001-264969P	P	20010129
US 2001-285624P	P	20010420
US 2001-935476	B2	20010822
US 2002-121415	A2	20020411
US 2002-30014	B2	20020724
US 2002-416207P	P	20021003
US 2002-417269P	P	20021008
US 2003-470364	A2	20030725
WO 2003-US31308	A2	20031003

AB The present invention provides peptide compns. capable of specifically binding selected HLA alleles and inducing T cell activation in T cells restricted by the HLA allele. The peptides are useful to elicit an immune response against a desired antigen. Specifically, the HLA alleles are HLA-A alleles, which induce a cytotoxic T cell response, and the peptides are from viral or bacterial antigens, cancer antigens, or autoantigens. The peptides can be used for preventing, treating, or diagnosing various diseases, including viral infection and cancer.

L50 ANSWER 8 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:814667 CAPLUS
DOCUMENT NUMBER: 137:324217
TITLE: Recombinant adenovirus expressing multiple mutant HIV antigens and immunostimulatory cytokine for use as genetic vaccine against human immunodeficiency virus infection
INVENTOR(S): Wang, Danher
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 156 pp., Cont.-in-part of Appl. No. PCT/US01/18238.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020155127	A1	20021024	US 2001-3035	20011101
US 6544780	B1	20030408	US 2000-585599	20000602
WO 2001091536	A2	20011206	WO 2001-US18238	20010604
WO 2001091536	A3	20020808		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 20030219458	A1	20031127	US 2002-280915		20021024
US 20040265336	A9	20041230			
CA 2465037	A1	20030508	CA 2002-2465037		20021101
WO 2003038057	A2	20030508	WO 2002-US35112		20021101
WO 2003038057	A3	20030717			

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002348154	A1	20030512	AU 2002-348154		20021101
US 20030138459	A1	20030724	US 2002-286332		20021101
US 20040185064	A9	20040923			
EP 1451329	A2	20040901	EP 2002-784374		20021101

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

CN 1636063	A	20050706	CN 2002-826611		20021101
JP 2005525085	T	20050825	JP 2003-540322		20021101
IN 2004CN01207	A	20060210	IN 2004-CN1207		20040601
ZA 2004003434	A	20060531	ZA 2004-3434		20060322
AU 2007203565	A1	20070816	AU 2007-203565		20070731
PRIORITY APPLN. INFO.:			US 2000-585599	A2	20000602
			WO 2001-US18238	A2	20010604
			AU 2001-271288	A3	20010604
			AU 2001-71288	T0	20010604
			US 2001-3035	A1	20011101
			WO 2002-US35112	W	20021101

AB Recombinant adenovirus and methods of administration to a host are provided for eliciting immune response of the host to human immunodeficiency virus (HIV). The recombinant adenovirus is capable of expressing multiple wild type or mutant HIV antigens such as HIV envelope proteins without the cleavage site or the cytosolic domain, structural proteins such as Gag and its proteolytic fragments in a natural, secreted or membrane-bound form, and regulatory proteins such as Tat, Rev and Nef. Immuno-stimulators such as cytokines can also be expressed by the recombinant adenovirus to further enhance the immunogenicity of the HIV antigens.

L50 ANSWER 9 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:533946 CAPLUS
DOCUMENT NUMBER: 137:92734
TITLE: Compositions comprising HLA class I epitope and class II epitope for eliciting cytotoxic T lymphocyte immunity against infections and cancer
INVENTOR(S): Vitiello, Maria A.; Chestnut, Robert W.; Sette, Alessandro D.; Celis, Esteban; Grey, Howard
PATENT ASSIGNEE(S): Epimmune Inc., USA
SOURCE: U.S., 85 pp., Cont.-in-part of U. S. Ser. No. 935,811, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 34
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 6419931	B1	20020716	US 1994-197484	19940216
ZA 9206441	A	19930607	ZA 1992-6441	19920826
EP 1018344	A2	20000712	EP 2000-102538	19920826
EP 1018344	A3	20000920		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
CA 2183416	A1	19950824	CA 1995-2183416	19950216
WO 9522317	A1	19950824	WO 1995-US2121	19950216
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UG				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9518473	A	19950904	AU 1995-18473	19950216
EP 804158	A1	19971105	EP 1995-910309	19950216
EP 804158	B1	20040929		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
AT 277633	T	20041015	AT 1995-910309	19950216
US 6322789	B1	20011127	US 1995-464496	19950605
US 6689363	B1	20040210	US 1999-239043	19990127
AU 9925004	A	19990624	AU 1999-25004	19990429
AU 727738	B2	20001221		
US 20030099634	A1	20030529	US 2002-128711	20020422
JP 2004075693	A	20040311	JP 2003-391442	20031120
JP 3586278	B2	20041110		

PRIORITY APPLN. INFO.:	US 1991-749568	B2 19910826
	US 1992-827682	B2 19920129
	US 1992-874491	B2 19920427
	US 1992-935811	B2 19920826
	US 1992-926666	B2 19920807
	EP 1992-307764	A3 19920826
	JP 1993-504664	A3 19920826
	US 1993-27146	B2 19930305
	US 1993-27746	B2 19930305
	US 1993-73205	B2 19930604
	US 1993-103396	B2 19930806
	US 1993-159184	B2 19931129
	US 1993-159339	A2 19931129
	US 1994-197484	A 19940216
	US 1994-205713	A2 19940304
	US 1994-278634	B2 19940721
	US 1994-344824	A2 19941123
	US 1994-347610	A2 19941201
	AU 1995-18473	A3 19950216
	WO 1995-US2121	W 19950216
	US 1995-461603	A1 19950605
	US 1996-13363P	P 19960313
	US 1997-820360	A2 19970312
	US 1997-978291	A2 19971125
	US 1998-189702	A2 19981110

AB Cytotoxic T lymphocyte (CTL) responses are effectively induced to an antigen of interest, particularly viral, bacterial, parasitic and tumor antigens. Compns., including pharmaceutical compns., of CTL-inducing peptide and an adjuvant or a lipidated peptide which induces a helper T cell (HTL) response stimulate the antigen specific CTL response. Among the viral antigens to which the CTL responses are effectively induced in humans are those of hepatitis B. The CTL response may be optimized by a regimen of two or more booster administrations. Cocktails of two or more CTL inducing

peptides are employed to optimize epitope and/or MHC class I restricted coverage.

REFERENCE COUNT: 84 THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 10 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:184919 CAPLUS
DOCUMENT NUMBER: 136:246374
TITLE: Antigen peptides having B7-like supermotif for preventing, treating and diagnosing diseases such as viral infection and cancers
INVENTOR(S): Sette, Alessandro; Sidney, John; Southwood, Scott
PATENT ASSIGNEE(S): Epimmune Inc., USA
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002020035	A1	20020314	WO 2000-US23913	20000901
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2421445	A1	20020314	CA 2000-2421445	20000901
AU 2000073396	A5	20020322	AU 2000-73396	20000901
EP 1320377	A1	20030625	EP 2000-961444	20000901
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2004522415	T	20040729	JP 2002-524518	20000901
PRIORITY APPLN. INFO.:			WO 2000-US23913 W	20000901

AB The present invention provides peptide compns. capable of binding glycoproteins encoded by HLA-A, HLA-B, and HLA-C alleles and inducing T cell activation in T cells restricted by the HLA allele. The immunogenic peptides are derived from antigen sequence of hepatitis B virus, hepatitis C virus, HIV, Plasmodium falciparum, MAGE2, MAGE3, Her2/neu, p53, Lassa virus, CEA, Epstein-Barr virus, etc. The peptides are useful to elicit a cytotoxic T cell immune response against a desired antigen.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 11 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:124651 CAPLUS
DOCUMENT NUMBER: 135:209508
TITLE: Diagnostic potential of an enzyme immunoassay system for evaluation of the spectrum of antibodies to hepatitis C structural and nonstructural antigens
AUTHOR(S): Pimenov, V. K.; Afanas'ev, A. Yu.; Kolobov, A. A.; Zubov, S. V.; Dobrotina, N. A.; Novikov, V. V.
CORPORATE SOURCE: Nizhegorod. Gos. Univ. im. N. I. Lobachevskogo, Nizhniy Novgorod, Russia
SOURCE: Voprosy Virusologii (2000), 45(6), 44-47

CODEN: VVIRAT; ISSN: 0507-4088
PUBLISHER: Meditsina
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB A new enzyme immunoassay EIA-HCV-Spectra test system constructed on the base of recombinant proteins and synthetic peptides allows sep. detection of antibodies to E1/E2, core, NS3, NS4, and NS5 antigens of hepatitis C virus (HCV). The system is highly specific and more sensitive than the test systems used in screening studies, which allows its use as a final test for antiHCV antibodies. Antibodies to various HCV antigens were analyzed using this test system in patients with acute and chronic hepatitis C and asymptomatic donors with antiHCV. In acute hepatitis C during the first-second week after clin. attis C and asymptomatic donors with antiHCV. In acute hepatitis C during the first and second week after clin. manifestation, antibodies to nonstructural virus proteins are detected 3-4 times less often than in chronic hepatitis C. Acute hepatitis C is characterized by the presence of antibodies only to core antigen (66%). In chronic condition combinations of antibodies to structural and nonstructural HCV antigens predominate: core + NS4, core + NS3 + NS4, core + NS3 + NS5 , core + NS4 + NS5, and core + NS3 + NS4 + NS5. In asymptomatic donors with antiHCV and in patients with chronic hepatitis C the spectra of antibodies were similar in 45.7% cases.

L50 ANSWER 12 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:577492 CAPLUS
DOCUMENT NUMBER: 133:134178
TITLE: Monoclonal antibodies against hepatitis C virus nonstructural protein 4 and hybridomas
INVENTOR(S): Li, Defu; Yin, Hongzhang; Li, Xiuhua; Meng, Shuhua; Liu, Ying; Zhang, Ning
PATENT ASSIGNEE(S): China Medicine & Biological Product Inspection Center, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 24 pp. CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1230591	A	19991006	CN 1998-117114	19980731
CN 1089802	B	20020828		
PRIORITY APPLN. INFO.:			CN 1998-117114	19980731

AB Anti-HCV core antigen, anti-HCV envelope antigen, anti-HCV NS3 protein, anti-HCV NS4 protein, and anti-HCV NS5 protein monoclonal antibodies are raised by immunizing Balb/c mice with resp. antigenic peptide. Five hybridoma cell lines capable of producing the monoclonal antibodies specific for HCV core antigen, envelope antigen, NS3 protein, NS4 protein, and NS5 protein are prepared by conventional hybridoma technol. The five monoclonal antibodies were purified, labeled with horse radish peroxidase, are used for detection of HCV antigen in blood products for transfusion and diagnosis and treatment of HCV infection.

L50 ANSWER 13 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:79709 CAPLUS

DOCUMENT NUMBER: 133:41773
TITLE: Assessment of diagnostic significance in the clinical use of third generation of recombinant immuno-Blot assay (RIBAIII)
AUTHOR(S): Suyama, Yoji; Iwata, Yoshimori; Mishima, Seiji; Ishikura, Hiroto; Shibata, Hiroshi; Masuda, Junichi
CORPORATE SOURCE: Division of Blood Transfusion, Shimane Medical University, Japan
SOURCE: Igaku to Yakugaku (1999), 42(5), 829-836
CODEN: IGYAEI; ISSN: 0389-3898
PUBLISHER: Shizen Kagakusha
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB We examined the diagnostic significance of third generation of Recombinant Immuno-Blot Assay (RIBAIII) in comparison with RIBAII using 80 HCV antibody pos. samples determined by second generation screening kit. RIBAIII uses synthetic peptides from the NS4 region (c100p) and the putative nucleocapsid (c22p) region as the antigenic epitopes instead of the use of recombinant antigens in RIBAII. Recombinant antigen of NS5 region is newly added in RIBAIII. Therefore, RIBAIII can be expected to increase the sensitivity as the diagnostic character and, in fact, we confirmed the actual increase of pos. rate and decrease of indeterminate or neg. ate as compared with RIBAII. Simultaneous detection of HCV-RNA by "AMPLICOR HCV" supported the high specificity of the results of RIBAIII. The sequential assay of the patient with acute HCV-hepatitis after needle-stick injury revealed the clin. importance of the reactivity with NS3 in terms of the early detection of HCV infection. Thus, our results indicate that RIBAIII is useful assay kit presenting highly sensitive and specific characters as the confirmation test of HCV infection.

L50 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:53495 CAPLUS
DOCUMENT NUMBER: 133:16047
TITLE: Hepatitis C epitopes from phage-displayed cDNA libraries and improved diagnosis with a chimeric antigen
AUTHOR(S): Pereboeva, Larisa A.; Pereboev, Alexander V.; Wang, Lin Fa; Morris, Glenn E.
CORPORATE SOURCE: MRIC Biochemistry Group, N. E. Wales Institute, Wrexham, LL11 2AW, UK
SOURCE: Journal of Medical Virology (2000), 60(2), 144-151
CODEN: JMVIDB; ISSN: 0146-6615
PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A novel method for cloning DNase I fragments into bacteriophage display vector fUSE2 was used to create libraries expressing hepatitis C virus (HCV) protein fragments on the phage surface. Selection by panning with a mixture of sera from five HCV-seropos. individuals enabled identification of antigenic determinants in NS3 (amino acids 1,383-1,415), NS4 (amino acids 1,930-1,938), and NS5 (amino acids 2,088-2,104). The NS3 result is the most accurate location to date of a major conformational determinant that cannot be mimicked by short peptides. Any expressed sequence from the phage library can be excised with Bgl II and cloned directly into the Bgl II site of an appropriate plasmid for bacterial expression. This enables production of chimeric proteins containing multiple antigenic determinants, illustrated by co-expression of the NS4P (amino acids 1,930-1,938) epitope with an NS4N fragment (amino acids 1,644-1,812) containing at least three linear HCV epitopes. When used to screen 35 individual HCV-pos. sera by ELISA, the

chimeric antigen detected eight more positives than NS4N alone and gave increased immunoreactivity with others. This approach of identifying antigenic regions by phage display and then co-expressing them as chimeric proteins may be generally applicable to the production of improved diagnostic antigens and recombinant vaccines.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 15 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:709003 CAPLUS
DOCUMENT NUMBER: 131:321538
TITLE: Immobilized antigen or antibody-containing device for immunodiagnosis
INVENTOR(S): Chowdhury, Mohammed Afzal; Childs, Mary Ann; Bernstein, David; Lovchik, Janece; Trainor, William
PATENT ASSIGNEE(S): Universal Healthwatch, Inc., USA
SOURCE: PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9956128	A1	19991104	WO 1999-US9331	19990430
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9936709	A	19991116	AU 1999-36709	19990430
PRIORITY APPLN. INFO.:			US 1998-69935	A2 19980430
			WO 1999-US9331	W 19990430

AB A diagnostic test device contains a filter and at least two peptides that correspond to the same analyte epitope, the test device exhibits improved transfer of fluid movement between assay components and is useful for the simultaneous assay of multiple analytes. The filter is an integral part of a strip and can be used for strip-testing of whole blood and other particulate-containing solns. generally. Surfaces of parts within the device are combined in particular ways to improve sample and reagent fluid movement and an optional chemical additive increase test quality. The immobilized peptides are selected from HIV envelope protein, HCV envelope protein, HCV NS3 protein, HCV NS4 protein, HCV NS5 protein, 15.5 kDa syphilis protein, 17 kDa syphilis protein, 44.5 kDa syphilis protein, and 47 kDa syphilis protein. Whole blood HIV tests are exemplified, including confirmatory tests, that are easy to carry out, show improved chemical resistance to false pos. results and greater ability to detect a wide variety of viral strains.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:699610 CAPLUS
DOCUMENT NUMBER: 132:136150
TITLE: Antigenic properties of synthetic peptides representing the main determinants of structural and nonstructural proteins of hepatitis C virus

AUTHOR(S): Primenov, V. K.; Zubov, S. V.; Kolobov, A. A.; Alekseenkova, T. I.; Firsova, T. V.; Semiletov, Yu A.; Afanas'ev, A. Yu.; Dobrotina, N. A.; Novikov, V. V.
CORPORATE SOURCE: Nizhegorodskii Gos. Univ. im. N. I. Lobachevskogo, Nizhniy Novgorod, Russia
SOURCE: Biotekhnologiya (1998), (3), 76-81
CODEN: BTKNEZ; ISSN: 0234-2758
PUBLISHER: Biotekhnologicheskaya Akademiya RF
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The authors studied the antigenic properties of synthetic peptides representing the main conservative determinants of core, NS3, NS4, and NS5 proteins of hepatitis C virus. The samples of blood sera from patients with hepatitis C were used. Apparently, the synthetic peptides consisting of >70 amino acid residues or combinations of peptides most completely reflected the antigenic properties of viral proteins. The authors selected the optimal antigenic compns. for the construction of screening and confirmatory test-kits for diagnosis of hepatitis C virus infection.

L50 ANSWER 17 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:671376 CAPLUS
DOCUMENT NUMBER: 132:164892
TITLE: Conserved hepatitis C virus sequences are highly immunogenic for CD4+ T cells: implications for vaccine development
AUTHOR(S): Lamonaca, Vincenzo; Missale, Gabriele; Urbani, Simona; Pilli, Massimo; Boni, Carolina; Mori, Cristina; Sette, Alessandro; Massari, Marco; Southwood, Scott; Bertoni, Roberto; Valli, Antonietta; Fiaccadori, Franco; Ferrari, Carlo
CORPORATE SOURCE: Laboratorio di Immunopatologia Virale, Divisione Malattie Infettive, Azienda Ospedaliera di Parma, and Cattedra di Malattie Infective, Universita di Parma, Italy
SOURCE: Hepatology (Philadelphia) (1999), 30(4), 1088-1098
CODEN: HPTLD9; ISSN: 0270-9139
PUBLISHER: W. B. Saunders Co.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The HLA class II-restricted T-cell response to hepatitis C virus (HCV) antigens is believed to influence the final outcome of hepatitis C, because it is vigorous in patients who recover from acute hepatitis C, but it is weak in those who develop a chronic infection. For this reason, exogenous stimulation of T-cell responses in chronic HCV infection may represent a strategy to cure patients with chronic hepatitis C by approximating the vigor of their T-cell reactivity to that of patients who succeed in recovering from hepatitis. It may also be a preventive approach to avoid spread of the virus by facilitating the development of a vigorous protective response at the very early stages of infection. T-cell-based vaccines composed of immunodominant, promiscuous, and conserved T-cell epitopes may represent a powerful tool to achieve optimal stimulation of the T-cell reactivity. To identify HLA class II-restricted T-cell epitopes useful for this purpose, 22 subjects with acute HCV infection were studied and followed for an average time of 29 mo. Eight of them recovered from hepatitis, and 14 developed a chronic infection. Overlapping 20-mer peptides covering the entire core and NS4 antigens and a panel of peptides representing highly conserved regions of core, NS3, NS4, and NS5 were used. By direct peripheral blood T-cell stimulation and by fine-specificity anal. of HCV-specific T-cell lines and

clones, highly immunogenic T-cell epitopes were identified within core, NS3, and NS4. All these epitopes are immunodominant and highly conserved among the known HCV isolates. Moreover, they are promiscuous, because they can be presented to T cells by different HLA class II mols. Immunodominance, sequence conservation, and promiscuity make these epitopes ideal components of preventive or therapeutic T-cell-based vaccines against HCV.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 18 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:298250 CAPLUS

DOCUMENT NUMBER: 131:127333

TITLE: Use of a novel hepatitis C virus (HCV) major-epitope chimeric polypeptide for diagnosis of HCV infection

AUTHOR(S): Chien, David Y.; Arcangel, Phillip; Medina-Selby, Angelica; Coit, Doris; Baumeister, Mark; Nguyen, Steve; George-Nascimento, Carlos; Gyenes, Alexander; Kuo, George; Valenzuela, Pablo

CORPORATE SOURCE: Chiron Corporation, Emeryville, CA, 94507, USA

SOURCE: Journal of Clinical Microbiology (1999), 37(5), 1393-1397
CODEN: JCMIDW; ISSN: 0095-1137

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The genome of hepatitis C virus (HCV) consists of seven functional regions: the core, E1, E2/NS1, NS2, NS3, NS4, and NS5 regions. The U.S. Food and Drug Administration-licensed 2.0G immunoassay for the detection of anti-HCV uses proteins from the core, NS3, and NS4 regions. The 3.0G ELISA includes the protein from the NS5 region. The necessity of detecting antibodies to viral envelope proteins (E1 and E2) and to different genotype samples has been demonstrated previously. In this study we have attempted to improve the sensitivity of the anti-HCV assay by developing a single multiple-epitope fusion antigen (MEFA; MEFA-6) which incorporates all of the major immunodominant epitopes from the seven functional regions of the HCV genome. A nucleic acid sequence consisting of proteins from the viral core, E1, E2, NS3, NS4, and NS5 regions and different subtype-specific regions of the NS4 region was constructed, cloned, and expressed in yeast. The epitopes present on this antigen can be detected by epitope-specific monoclonal and polyclonal antibodies. In a competition assay, the MEFA-6 protein competed with 83 to 96% of genotype-specific antibodies from HCV genotype-specific peptides. This recombinant antigen was subsequently used to design an anti-HCV chemiluminescent immunoassay. We designed our assay using a monoclonal anti-human IgG antibody bound to the solid phase. Because MEFA-6 is fused with human superoxide dismutase (h-SOD), we used an anti-human superoxide dismutase, di-Me acridinium ester-labeled monoclonal antibody for detection. Our results indicate that MEFA-6 exposes all of the major immunogenic epitopes. Its excellent sensitivity and specificity for the detection of clin. seroconversion are demonstrated by this assay.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:12144 CAPLUS

DOCUMENT NUMBER: 130:221851

TITLE: Clonality and specificity of cryoglobulins associated with HCV: pathophysiological implications

AUTHOR(S): Mondelli, Mario U.; Zorzoli, Irene; Cerino, Antonella; Cividini, Agostino; Bissolati, Morena; Segagni, Laura; Perfetti, Vittorio; Anesi, Ernesto; Garini, Pietro; Merlini, Giampaolo
CORPORATE SOURCE: Laboratori di Ricerca-Area Infettivologica, Istituto di Clinica delle, IRCCS Policlinico San Matteo and University of Pavia, Pavia, 27100, Italy
SOURCE: Journal of Hepatology (1998), 29(6), 879-886
CODEN: JOHEEC; ISSN: 0168-8278
PUBLISHER: Munksgaard International Publishers Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Background/Aims: Hepatitis C virus (HCV) infection plays a central role in the pathogenesis of mixed cryoglobulinemia through mol. mechanisms which remain to be elucidated. The aim of this study was to investigate the role of antibody responses to HCV in the pathogenesis of cryoglobulinemia through characterization of the anti-HCV specificity and immunochem. characteristics of the Igs involved in cryopptn. Methods: Sera from 50 consecutive patients with chronic HCV infection (RNA pos.) were screened for the presence of cryoglobulins. The two major components of cryoppts., IgM rheumatoid factors and IgG, were separated by high performance liquid chromatog. and analyzed for immunochem. composition by immunoblotting and antibody specificity by ELISA and immunoblotting using recombinant HCV proteins and synthetic peptides as antigens. Results: Cryoppts. were observed in 27 patients and characterized by immunofixation: 13 (48%) were classified as type II and 14 (52%) as type III. Monoclonal Igs were detected by immunoblotting in 20 cryoppts.: IgM in 14 samples and IgG in 14, with a clear preponderance of IgG3 (12/14). Specificity studies on sera and purified IgM and IgG fractions from cryoppts. revealed enrichment in cryoglobulins, predominantly polyclonal IgG1, reactive with the HCV structural proteins, whereas specificities for nonstructural viral proteins were relatively less represented compared to whole serum. No restricted pattern of fine specificity was observed IgG3 subclass was apparently not involved in HCV nucleoprotein binding. Conclusions: these findings do not support a direct link between monoclonal cryoglobulins and immune response to HCV. According to the proposed pathogenetic model, HCV infection can induce the formation of cryoprecipitable rheumatoid factors, sustain their production, and eventually lead to monoclonal B-cell expansion through several cooperative mechanisms.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 20 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:286360 CAPLUS
DOCUMENT NUMBER: 126:263158
ORIGINAL REFERENCE NO.: 126:50973a,50976a
TITLE: Spliced peptides for the diagnosis and detection of hepatitis C virus (HCV) infection
INVENTOR(S): Hosein, Barbara; Wang, Chang Yi
PATENT ASSIGNEE(S): United Biomedical, Inc., USA
SOURCE: Ger. Offen., 71 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19549390	A1	19970320	DE 1995-19549390	19951027
DE 19549390	C2	19971023		

US 5736321	A	19980407	US 1995-530550		19950919
DE 19540105	C1	19970220	DE 1995-19540105		19951027
IN 2001CA00403	A	20050311	IN 2001-CA403		20010724
PRIORITY APPLN. INFO.:			US 1995-530550	A	19950919
			DE 1995-19540105	A3	19951027
			US 1994-333573	B2	19941101
			IN 1995-CA1358	A3	19951031

AB Novel peptides are disclosed which are specific for the diagnosis of hepatitis C virus (HCV) infection, as are compns. containing mixts. of these peptides. The peptides have at least one antigenic region which is effective in the detection of HCV-associated antibodies using an immunoassay. A novel spliced peptide is disclosed which can be used to block the non-specific reactivity of particular NS-3 conformational epitopes. The fused peptide composition includes (1) a linear fused peptide in which the C-terminus is a -COOH or -CONH2 group, (2) one or more of several disclosed peptide sequences, and (3) an amino acid sequence corresponding to the NS-3 region of HCV. Thus, different mixts. of peptides were used detect antibodies in a panel of human sera. Mixts. A and B and D and E showed comparable sensitivity on the whole, but with samples containing core protein 2 and 3, the D and E mixts. showed higher sensitivity than the A and B mixts.

L50 ANSWER 21 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	1996:483107 CAPLUS
TITLE:	Different clinical behaviors of acute hepatitis C virus infection are associated with different vigor of the anti-viral cell-mediated immune response
AUTHOR(S):	Missale, Gabriele; Bertoni, Roberto; Lamonaca, Vincenzo; Valli, Antonietta; Massari, Marco; Mori, Cristina; Rumi, Maria Grazia; Houghton, Michael; Fiaccadori, Franco; Ferrari, Carlo
CORPORATE SOURCE:	Cattedra Malattie Infettive, Univ. Parma, Parma, CA, 43100, USA
SOURCE:	Journal of Clinical Investigation (1996), 98(3), 706-714 CODEN: JCINAO; ISSN: 0021-9738
PUBLISHER:	Rockefeller University Press
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB The anti-viral T cell response is believed to play a central role in the pathogenesis of hepatitis C virus infection. Since chronic evolution occurs in >50% of HCV infections, the sequential anal. of the T cell response from the early clin. stages of disease may contribute to define the features of the T cell response associated with recovery or chronic viral persistence. For this purpose, 21 subjects with acute hepatitis C virus infection were sequentially followed for an average time of 44 wk. Twelve patients normalized transaminase values that remained normal throughout the follow-up period; all but two cleared hepatitis C virus-RNA from serum. The remaining nine patients showed persistent viremia and elevated transaminases. Anal. of the peripheral blood T cell proliferative response to core, E1, E1, NS3, NS4, and NS5 recombinant antigens and synthetic peptides showed that responses to all hepatitis C virus antigens, except E1, were significantly more vigorous and more frequently detectable in patients who normalized transaminase levels than in those who did not. By sequential evaluation of the T cell response, a difference between the two groups of patients was already detectable at the very early stages of acute infection and then maintained throughout the followup period. The results suggest that the vigor of the T cell response during the early stages of infection may be a critical determinant of disease resolution and control of infection.

L50 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:304303 CAPLUS
DOCUMENT NUMBER: 124:340908
ORIGINAL REFERENCE NO.: 124:63325a,63328a
TITLE: Antigenic peptides derived from hepatitis C virus for use in diagnosis, treatment, and prophylaxis of infection
INVENTOR(S): Wang, Chang Yi; Hosein, Barbara H.
PATENT ASSIGNEE(S): United Biomedical, Inc., USA
SOURCE: Ger. Offen., 61 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19500394	A1	19960502	DE 1995-19500394	19950109
DE 19500394	C2	19960905		
GB 2294690	A	19960508	GB 1994-25604	19941219
GB 2294690	B	19981028		
NL 9402224	A	19960603	NL 1994-2224	19941228
NL 194971	C	20030321		
WO 9613616	A1	19960509	WO 1995-US13660	19951023
W: AL, AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TT, UA, UG, UZ, VN				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9539669	A	19960523	AU 1995-39669	19951023
JP 08208695	A	19960813	JP 1995-285020	19951101
JP 3199995	B2	20010820		
JP 11100397	A	19990413	JP 1998-212080	19951101
IN 2001CA00403	A	20050311	IN 2001-CA403	20010724

PRIORITY APPLN. INFO.:			
	US 1994-333573	A	19941101
	WO 1995-US13660	W	19951023
	IN 1995-CA1358	A3	19951031
	JP 1995-285020	A3	19951101

AB Synthetic linear and branched antigenic peptides derived from proteins of hepatitis C virus are described for use in the diagnosis, treatment, and prophylaxis of viral infection. These peptides are derived from variable regions of viral proteins and peptide families encompassing variant sequences are also described. The preparation and use of a number of such peptides in immunoassays is demonstrated.

L50 ANSWER 23 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:191971 CAPLUS
DOCUMENT NUMBER: 124:229978
ORIGINAL REFERENCE NO.: 124:42637a,42640a
TITLE: Process for determining specific immunoglobulins using multiple antigens
INVENTOR(S): Wienhues-Thelen, Ursula-Henrike; Faatz, Elke; Kruse-Mueller, Cornelia; Ofenloch-Haehnle, Beatus; Hoess, Eva; Seidel, Christoph; Wiedmann, Michael
PATENT ASSIGNEE(S): Boehringer Mannheim GmbH, Germany
SOURCE: Ger. Offen., 30 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent

LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4430972	A1	19960201	DE 1994-4430972	19940831
DE 4430973	A1	19960201	DE 1994-4430973	19940831
DE 4430998	A1	19960201	DE 1994-4430998	19940831
DE 4439345	A1	19960201	DE 1994-4439345	19941104
DE 4439346	A1	19960201	DE 1994-4439346	19941104
DE 4439347	A1	19960201	DE 1994-4439347	19941104
CA 2172144	A1	19960208	CA 1995-2172144	19950724
CA 2172144	C	20010206		
CA 2172145	A1	19960208	CA 1995-2172145	19950724
CA 2195648	A1	19960208	CA 1995-2195648	19950724
CA 2195752	A1	19960208	CA 1995-2195752	19950724
CA 2195753	A1	19960208	CA 1995-2195753	19950724
WO 9603650	A1	19960208	WO 1995-EP2915	19950724
W: AU, CA, CN, FI, JP, KR, NO, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
WO 9603651	A1	19960208	WO 1995-EP2916	19950724
W: AU, CA, CN, FI, JP, KR, NO, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
WO 9603652	A1	19960208	WO 1995-EP2919	19950724
W: AU, CA, CN, FI, JP, KR, NO, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
WO 9603409	A1	19960208	WO 1995-EP2920	19950724
W: AU, CA, CN, FI, JP, KR, NO, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
WO 9603423	A1	19960208	WO 1995-EP2921	19950724
W: AU, CA, CN, FI, JP, KR, NO, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
WO 9603410	A1	19960208	WO 1995-EP2923	19950724
W: CN, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9531649	A	19960222	AU 1995-31649	19950724
AU 682278	B2	19970925		
AU 9531650	A	19960222	AU 1995-31650	19950724
AU 689626	B2	19980402		
AU 9532204	A	19960222	AU 1995-32204	19950724
AU 688953	B2	19980319		
AU 9532205	A	19960222	AU 1995-32205	19950724
AU 690315	B2	19980423		
AU 9532206	A	19960222	AU 1995-32206	19950724
AU 684992	B2	19980108		
EP 720614	A1	19960710	EP 1995-928451	19950724
EP 720614	B1	20000524		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
EP 723551	A1	19960731	EP 1995-928452	19950724
EP 723551	B1	20020306		
R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, SE				
CN 1130910	A	19960911	CN 1995-190675	19950724
JP 08509995	T	19961022	JP 1996-505470	19950724
JP 2771900	B2	19980702		
CN 1134154	A	19961023	CN 1995-190794	19950724
CN 1046531	B	19991117		
JP 09500915	T	19970128	JP 1995-505471	19950724
JP 2921989	B2	19990719		
EP 772616	A1	19970514	EP 1995-926976	19950724
EP 772616	B1	19991215		

	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE					
EP	772774	A1	19970514	EP	1995-928450	19950724
EP	772774	B1	20060628			
	R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, SE					
EP	774119	A1	19970521	EP	1995-927713	19950724
EP	774119	B1	20040303			
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE					
EP	774120	A1	19970521	EP	1995-927714	19950724
	R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, SE					
CN	1152923	A	19970625	CN	1995-194207	19950724
CN	1075817	B	20011205			
CN	1157655	A	19970820	CN	1995-195022	19950724
JP	09508473	T	19970826	JP	1996-503549	19950724
JP	3604147	B2	20041222			
CN	1161745	A	19971008	CN	1995-194321	19950724
CN	1114106	B	20030709			
JP	10503485	T	19980331	JP	1996-505472	19950724
JP	3583436	B2	20041104			
JP	10504539	T	19980506	JP	1996-505469	19950724
JP	3556228	B2	20040818			
JP	10506708	T	19980630	JP	1996-505468	19950724
JP	3923076	B2	20070530			
AT	187732	T	20000115	AT	1995-926976	19950724
ES	2143059	T3	20000501	ES	1995-926976	19950724
AT	193294	T	20000615	AT	1995-928451	19950724
ES	2148540	T3	20001016	ES	1995-928451	19950724
AT	214073	T	20020315	AT	1995-928452	19950724
ES	2171190	T3	20020901	ES	1995-928452	19950724
AT	261122	T	20040315	AT	1995-927713	19950724
PT	774119	T	20040730	PT	1995-927713	19950724
ES	2217282	T3	20041101	ES	1995-927713	19950724
AT	331952	T	20060715	AT	1995-928450	19950724
EP	1742056	A2	20070110	EP	2006-7308	19950724
EP	1742056	A3	20071226			
	R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, SE					
ES	2268694	T3	20070316	ES	1995-928450	19950724
NO	9601161	A	19960321	NO	1996-1161	19960321
NO	9601162	A	19960321	NO	1996-1162	19960321
NO	316381	B1	20040119			
FI	9601349	A	19960325	FI	1996-1349	19960325
FI	9601350	A	19960325	FI	1996-1350	19960325
US	5804371	A	19980908	US	1996-615279	19960613
US	5958783	A	19990928	US	1996-615278	19960620
NO	9700130	A	19970110	NO	1997-130	19970110
NO	9700197	A	19970116	NO	1997-197	19970116
US	5981286	A	19991109	US	1997-765452	19970116
NO	9700292	A	19970313	NO	1997-292	19970123
FI	9700299	A	19970124	FI	1997-299	19970124
FI	9700300	A	19970124	FI	1997-300	19970124
FI	9700301	A	19970324	FI	1997-301	19970124
US	6531572	B1	20030311	US	1997-776189	19970124
US	6613530	B1	20030902	US	1997-776188	19970124
US	6780967	B1	20040824	US	1999-453174	19991202
US	20010021503	A1	20010913	US	2001-801157	20010307
US	20040039178	A1	20040226	US	2003-360647	20030210
US	7390624	B2	20080624			
US	20050074750	A1	20050407	US	2003-613018	20030707
PRIORITY APPLN. INFO.:				DE	1994-4426276	A1 19940725
				DE	1994-4430972	A 19940831
				DE	1994-4430973	A 19940831
				DE	1994-4430998	A 19940831

DE 1994-4439345	A	19941104
DE 1994-4439346	A	19941104
DE 1994-4439347	A	19941104
EP 1995-928450	A3	19950724
WO 1995-EP2915	W	19950724
WO 1995-EP2916	W	19950724
WO 1995-EP2919	W	19950724
WO 1995-EP2920	W	19950724
WO 1995-EP2921	W	19950724
WO 1995-EP2923	W	19950724
US 1997-776188	A3	19970124
US 1997-776189	B3	19970124
US 1997-776190	A3	19970124

AB A process is described for immunol. determining specific antibodies, especially those against HIV and hepatitis C virus, in human serum by incubating the serum in the presence of a solid phase with two antigens specific for the antibodies which are to be determined The first antigen has at least one label, and the second antigen is (a) bound to the solid phase or (b) is present in a form in which it can bind to the solid phase. The amount of antibody is determined by measuring amount of label in the solid phase and/or in the liquid phase. One of the two antigens must contain multiple epitope regions which react with the antibody which is to be determined Thus, antibodies were determined which were specific for multimeric antigens from gp41 from HIV virus using this bridge test immunoassay.

L50 ANSWER 24 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	1995:888040 CAPLUS
DOCUMENT NUMBER:	123:283629
ORIGINAL REFERENCE NO.:	123:50839a,50842a
TITLE:	Compositions and methods for eliciting cytotoxic T lymphocyte immunity
INVENTOR(S):	Vitiello, Maria A.; Chesnut, Robert W.; Sette, Alessandro D.; Celis, Esteban; Grey, Howard
PATENT ASSIGNEE(S):	Cytel Corp., USA
SOURCE:	PCT Int. Appl., 108 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	34

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9522317	A1	19950824	WO 1995-US2121	19950216
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UG				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6419931	B1	20020716	US 1994-197484	19940216
AU 9518473	A	19950904	AU 1995-18473	19950216
EP 804158	A1	19971105	EP 1995-910309	19950216
EP 804158	B1	20040929		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
AT 277633	T	20041015	AT 1995-910309	19950216
US 20030099634	A1	20030529	US 2002-128711	20020422

PRIORITY APPLN. INFO.:	US 1994-197484	A	19940216

US 1991-749568	B2	19910826
US 1992-827682	B2	19920129
US 1992-874491	B2	19920427
US 1992-935811	B2	19920826
WO 1995-US2121	W	19950216

AB Cytotoxic T lymphocyte (CTL) responses are effectively induced to an antigen of interest, particularly viral, bacterial, parasitic and tumor antigens. Compns., including pharmaceutical compns., of CTL-inducing peptide and an adjuvant or a lipidated peptide which induces a helper T cell (HTL) response stimulate the antigen specific CTL response. Among the viral antigens to which the CTL responses are effectively induced in humans are those of hepatitis B (HBV). The CTL response may be optimized by a regimen of two or more booster administrations, and cocktails of two or more CTL inducing peptides are employed to optimize epitope and/or MHC class I restricted coverage. In example, HLA-A2.1-restricted CTL was induced by s.c. priming with purified HBV peptides in incomplete Freund's adjuvant, combination of CTL and T-helper epitopes were used to induce CTL, and specific CTL inducing peptides were used as vaccines for preventing and treating hepatitis C virus infection, melanoma, human papillomavirus infection, and HIV infection.

L50 ANSWER 25 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:829087 CAPLUS
DOCUMENT NUMBER: 124:6563
ORIGINAL REFERENCE NO.: 124:1415a,1418a
TITLE: Epitope mapping of the NS4 and NS5 gene products of hepatitis C virus and the use of a chimeric NS4-NS5 synthetic peptide for serodiagnosis
AUTHOR(S): Rosa, C.; Osborne, S.; Garetto, F.; Griva, S.; Rivella, A.; Calabresi, G.; Guaschino, R.; Bonelli, F.
CORPORATE SOURCE: Sorin Biomedica, R and D Diagnostic Division, Strada per Crescentino, Saluggia (VC), 13040, Italy
SOURCE: Journal of Virological Methods (1995), 55(2), 219-32
CODEN: JVMEDH; ISSN: 0166-0934
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Specific domains of the NS4 and NS5 gene products of hepatitis C virus have been identified using hydrophilicity profiles for the prediction of potential immunogenic regions, and epitope scanning techniques. Peptides synthesized on the basis of such data show excellent reactivity in the ELISA format. Introduction of a glycine-glycine spacer between two peptides (NS4-12 and NS5-44) to give a single chimeric peptide does not appear to impair immunoreactivity. An ELISA based on the chimeric peptide and a Core-NS3 recombinant protein correctly diagnoses a cohort of hemodialyzed patients, three com. HCV panels and the sera of a neg. control population.

L50 ANSWER 26 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:723337 CAPLUS
DOCUMENT NUMBER: 123:152868
ORIGINAL REFERENCE NO.: 123:27045a,27048a
TITLE: Structured synthetic antigen libraries as diagnostics, vaccines and therapeutics
INVENTOR(S): Wang, Chang Yi; Zamb, Timothy J.; Ye, John; Kaminsky, Stephen M.; Hosein, Barbara; Nixon, Douglas F.; Koff, C. Wayne; Kowalski, Jacek; Walfield, Alan M.
PATENT ASSIGNEE(S): United Biomedical, Inc., USA
SOURCE: PCT Int. Appl., 216 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9511998	A1	19950504	WO 1994-US12268	19941026
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2175579	A1	19950504	CA 1994-2175579	19941026
AU 9480916	A	19950522	AU 1994-80916	19941026
EP 725838	A1	19960814	EP 1994-932048	19941026
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				

PRIORITY APPLN. INFO.: US 1993-143412 A 19931026
WO 1994-US12268 W 19941026

AB The present invention relates to "structured synthetic antigen libraries" (SSAL) composed of related peptides synthesized simultaneously in a single peptide synthesis. This "structured" library contrasts to those libraries previously described as "random peptide libraries" in that the order or structure within a synthetic antigen is provided by invariant amino acid residues that define the framework sequence of the synthetic antigen. The specific amino acids and their frequency of appearance at a variant locus within aligned peptide sequences is defined by the primary sequences of the several variants that make up the alignment used to construct the antigen peptide library. A method of constructing an open diagnostic, vaccine or therapeutic for a mutational infectious agent is also provided. The invention further provides the SSAL in diagnostic methods, kits, vaccination methods, vaccine compns. and pharmaceutical compns. The libraries are prepared from variable domains in proteins and provide improved vaccines, diagnostics and therapeutics for infectious agents, etc., from such proteins.

L50 ANSWER 27 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:450822 CAPLUS
DOCUMENT NUMBER: 122:237247
ORIGINAL REFERENCE NO.: 122:43315a,43318a
TITLE: Linear B-cell epitopes of the NS3-NS4-NS5 proteins of the hepatitis C virus as modeled with synthetic peptides
AUTHOR(S): Khudyakov, Yu. E.; Khudyakova, N. S.; Jue, D. L.; Lambert, S. B.; Fang, S.; Fields, H. A.
CORPORATE SOURCE: Public Health Service, U.S. Dep. Health and Human Services, Atlanta, GA, 30333, USA
SOURCE: Virology (1995), 206(1), 666-72
CODEN: VIRLAX; ISSN: 0042-6822
PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A set of 150 synthetic peptides spanning the proteins NS3-NS4-NS5 of the hepatitis C virus (HCV) was synthesized and tested with a panel of 20 sera obtained from HCV-infected patients. Of 62 peptides prepared from the NS3 region, none exhibited strong antigenic reactivity. Rather, five peptides from this region demonstrated specific reactivity with only 5-10% of

anti-HCV-pos. sera. Nonetheless, it is well known that the NS3 region contains strong antigenic epitopes. These epitopes appear to be modeled in a functionally active manner with recombinant proteins and cannot be mimicked properly with short synthetic peptides. This finding suggests that the major NS3 antigenic epitopes are conformationally dependent. Seven of 20 peptides prepared from the NS4 region were immunoreactive. Five peptides from this region demonstrated very strong HCV-specific antigenic reactivity. Four of the five peptides belong to the recognized immunoreactive 5-1-1 region located inside the C100-3 antigen. One peptide demonstrating immunoreactivity with approx. 90% of anti-HCV-pos. sera was found outside the C100-3 region at the C-terminal part of the NS4 protein. Of 68 peptides synthesized from the NS5 protein, 30 were immunoreactive. Six of the 30 demonstrated immunoreactivity with 35-50% of anti-HCV-pos. sera. Thus, the NS4 and NS5 regions of the HCV polyprotein contain a large number of specific, broadly reactive, linear antigenic epitopes. The highly antigenic reactivity of the NS5 region suggests that this protein may have significant diagnostic potential.

L50 ANSWER 28 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:665947 CAPLUS
DOCUMENT NUMBER: 119:265947
ORIGINAL REFERENCE NO.: 119:47473a,47476a
TITLE: Antigenic polypeptides from hepatitis C virus and their use as diagnostic agents
INVENTOR(S): Parker, David; Rodgers, Brian Colin
PATENT ASSIGNEE(S): Wellcome Foundation Ltd., UK
SOURCE: PCT Int. Appl., 99 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9317110	A2	19930902	WO 1993-GB345	19930219
WO 9317110	A3	19931014		
W: AU, CA, CZ, FI, HU, JP, KR, NO, NZ, PL, SK, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9335096	A	19930913	AU 1993-35096	19930219
ZA 9301203	A	19931004	ZA 1993-1203	19930219
PRIORITY APPLN. INFO.:			GB 1992-3803 A	19920221
			WO 1993-GB345 A	19930219

AB Antigenic polypeptides of hepatitis C virus derived from at least three viral proteins are used in combination to increase the sensitivity of immunoassays for parenterally transmitted non-A, non-B hepatitis virus. The antigens are derived from structural and non-structural proteins. The peptides may prepared by expression of genes for the individual peptides or by expression of chimeric genes for fusion proteins. Sera were screened for reactivity to a number of hepatitis C antigens and it was found that some individuals react predominantly or exclusively with a single antigen of the virus.

L50 ANSWER 29 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:575422 CAPLUS
DOCUMENT NUMBER: 119:175422
ORIGINAL REFERENCE NO.: 119:31215a
TITLE: Hepatitis C virus (HCV) types 3 and 4, and nucleic acid or peptide derived therefrom for HCV typing

INVENTOR(S): Simmonds, Peter; Chan, Shui Wan; Yap, Peng Lee
PATENT ASSIGNEE(S): Common Services Agency, UK
SOURCE: PCT Int. Appl., 120 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9310239	A2	19930527	WO 1992-GB2143	19921120
WO 9310239	A3	19930722		
W: AU, CA, FI, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
ZA 9209015	A	19930517	ZA 1992-9015	19921120
CA 2123875	A1	19930527	CA 1992-2123875	19921120
CA 2123875	C	20050524		
AU 9230887	A	19930615	AU 1992-30887	19921120
AU 671967	B2	19960919		
EP 610436	A1	19940817	EP 1992-924761	19921120
EP 610436	B1	20030122		
R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, SE				
JP 07501442	T	19950216	JP 1993-509110	19921120
JP 3688290	B2	20050824		
AT 231557	T	20030215	AT 1992-924761	19921120
ES 2065863	T3	20030901	ES 1992-924761	19921120
FI 9402369	A	19940719	FI 1994-2369	19940520
FI 113967	B1	20040715		
US 5763159	A	19980609	US 1994-244116	19940715
US 20030198946	A1	20031023	US 2003-396964	20030325
US 7179470	B2	20070220		
US 20070128221	A1	20070607	US 2007-652862	20070112

PRIORITY APPLN. INFO.:			
GB 1991-24696	A	19911121	
GB 1992-13362	A	19920624	
WO 1992-GB2143	W	19921120	
US 1994-244116	A3	19940715	
US 1998-39130	B1	19980313	
US 2003-396964	A1	20030325	

AB Hepatitis C virus types 3 and 4 are identified by phylogenetic anal. based on the information obtained by PCR of the 5' non-coding region (5'NCR) of HCV samples from various geog. locations. Nucleotide sequences of the non-coding, core, E1, E2 or NS1-5 regions of types 3 and 4 of HCV are distinctive from those of the known type 1 and 2 HCV and can be used to design DNA probes for HCV typing. Also peptides derived from the core, NS3, and NS4 or NS5 regions of these two types of HCV can be used as antigens for diagnosis of the HCV. Also shown was the typing of HCV based on the sequence variations between HCV types and thus the distinctive endonuclease cleavage patterns.

L50 ANSWER 30 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:529836 CAPLUS
DOCUMENT NUMBER: 117:129836
ORIGINAL REFERENCE NO.: 117:22537a,22540a
TITLE: Hepatitis C antibody assay utilizing recombinant antigens
INVENTOR(S): Devare, Sushil G.; Desai, Suresh M.; Casey, James M.; Dawson, George J.; Lesniewski, Richard R.; Dailey, Stephen H.; Gutierrez, Robin A.; Stewart, James Lawrence

PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: Eur. Pat. Appl., 115 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 472207	A2	19920226	EP 1991-114161	19910823
EP 472207	A3	19920826		
EP 472207	B1	19991013		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE				
CA 2049679	C	19920225	CA 1991-2049679	19910822
CA 2049679	A1	19920225		
AU 9182774	A	19920507	AU 1991-82774	19910823
AU 655592	B2	19950105		
AT 185605	T	19991015	AT 1991-114161	19910823
ES 2139571	T3	20000216	ES 1991-114161	19910823
JP 04281792	A	19921007	JP 1991-240587	19910826
JP 3354579	B2	20021209		
US 6172189	B1	20010109	US 1997-867611	19970602
US 6593083	B1	20030715	US 2000-690359	20001017

PRIORITY APPLN. INFO.:		
US 1990-572822	A	19900824
US 1990-614069	A	19901107
US 1991-748561	B2	19910821
US 1991-748565	B2	19910821
US 1991-748566	B2	19910821
US 1992-989843	B1	19921119
US 1994-179896	B1	19940110
US 1996-646757	B1	19960501
US 1997-867611	A3	19970602

AB Immunoassays for detecting antibodies to antigens of hepatitis C virus (HCV) in a fluid sample are disclosed which use recombinant antigens. The antigens are fusion products with CMP-KDO synthetase (CKS) and are produced in Escherichia coli. The cloning vector pJO200 was used to fuse DNA encoding the recombinant proteins to DNA for CKS. Plasmid pHCV-34, encoding CKS-HCV core antigen (amino acids 1-150) fusion product, was prepared and expressed in E. coli. A screening immunoassay using this recombinant CKS-core fusion product and fusion protein CKS-33-BCD (prepared from plasmid pHCV-31; containing amino acid sequences from HCV NS3 and NS4 proteins) was sufficiently sensitive to detect seroconversion during the acute phase of HCV infection in chimpanzees. No preinoculation specimens were reactive.